

2013 Tchefuncte River Complex Aquatic Vegetation Control Plan

LDWF, Inland Fisheries

1. Waterbody type – Natural river system including the Tchefuncte River, Bogue Falaya River and the Abita River
2. Surface Acres-The three streams combine to total 74 river miles and drain a 192 square mile watershed.
3. Waterbody Board or Lake Commission – The State of Louisiana has authority of the state-owned water bottoms of the Tchefuncte River. The laws governing Natural and Scenic River Systems regulate some land practices along the river and also protect the river from hydrologic alterations. The Louisiana Department of Wildlife and Fisheries (LDWF) regulates fish and wildlife resources in all public waters that drain the Tchefuncte River watershed, including the Bogue Falaya and Abita Rivers.

What significant stakeholders use the lake?

Residential development, recreational fishermen, boaters and hunters.

What are their needs and concerns?

There are minor concerns annually for nuisance plant control, primarily from waterfront residents.

Aquatic Vegetation Status:

Although aquatic plant issues do not typically restrict access in these areas, common salvinia, water hyacinth, duckweed, and alligator weed are the primary focus of nuisance plant control in the system. Based on current estimates, approximately 10 acres of common salvinia, 5 acres of water hyacinth, and 5 acres of duckweed will need to be treated in the Tchefuncte River complex in 2013. A stretch containing over 2 river miles of Brazilian waterweed (*Egeria densa*) was found growing in the upper reaches of the Bogue Falaya River in 2011. Common salvinia plant mass increased moderately in 2012. However, storm surge associated with Hurricane Isaac stranded or flushed most of the plants from the system.

Limitations:

Brazilian waterweed in the Bogue Falaya River will be difficult to treat in the moderately flowing stream. Flowing water systems make it difficult to get the necessary contact time for herbicides to be effective.

Past Control Measures:

Herbicide applications have been made from boat mounted sprayers when and where nuisance plants accumulated. In 2011, 37 acres of alligator weed and common salvinia were treated with glyphosate (0.75 gal/acre). Only 170 acres of aquatic vegetation have been treated since 2007 (Table 1). Two acres of common salvinia and 14 acres of alligator weed were treated in the complex by LDWF in 2012. Glyphosate and a nonionic surfactant were applied at 0.75 gal / acre and 0.25 gal / acre respectively.

Table 1. Acres of Vegetation Treated Annually 2007-2012

	2007	2008	2009	2010	2011	2012	Total
Alligator Weed	9	5			20	14	48
Pennywort	3			3	8		14
Primrose				9			9
Common salvinia	2	2	46	6	9	2	67
Sedge	4						4
Torpedograss			2				2
Water Hyacinth		5		5			10
Water Lettuce	16						16
Total	34	12	48	23	37		170

Recommendations:

Regular assessments and herbicide applications will be made to ensure access to all major waterways in the complex. Requests for nuisance plant treatments primarily come from waterfront residents. LDWF will continue to prioritize and make treatments as necessary in this area. Common salvinia will continue to be treated with a glyphosate (0.75 gal/acre)/diquat (0.25 gal/acre) mix with Aqua King Plus (.25 gal/acre) and Thoroughbred (8oz/acre) surfactants as needed. Alligator weed will be treated with imazamox (Clearcast at 0.5 gal/acre) in developed areas or Imazapyr (Ecomazapyr at 0.5 gal/acre) in undeveloped areas with no restrictions. A methylated seed oil surfactant (Inergy at 0.25 gal/acre) will be added to either of the two alligator weed treatments to improve efficacy. Water hyacinth will be treated with 2,4-D at 0.5 gal/acre.

High concentration treatments of diquat have been reported to kill Brazilian waterweed in streams. Because it is a contact herbicide, diquat is likely the best option for controlling this plant in a flowing water situation. This treatment is being considered for the stretch of the Bogue Falaya River containing the plant if herbicide application is determined to be necessary.

Map 1. Map of Tchefuncte River complex with labeled aquatic plant issues and locations.

